



## SCHOOL ORGANISATIONAL HEALTH AND SCHOOL TYPES: EFFECT ON ACADEMIC ACHIEVEMENT OF STUDENTS

Vidyanand Khandagale<sup>1</sup> and Dr. Shefali Pandya<sup>2</sup>

### Abstract

*Organizational health refers to an organization's ability to achieve its goals based on an environment that seeks to improve organizational performance and support student and employee well-being. Organizational health is conceptualized in terms of three levels, namely, the technical, managerial, and institutional which combine to create a healthy school. The present study identified three categories of schools based on school types by management. These categories are private-aided schools, private-unaided schools and municipal schools. These three types of schools are then compared on the seven dimensions of Organizational Health Inventory (OHI). The present paper attempts to analyse whether the (a) school organizational health and (b) academic achievement of students differs on the basis of school types, viz., private-unaided, private-aided and municipal schools in Greater Mumbai after adjusting for school organizational health. The investigation has adopted the descriptive method of the causal-comparative type and is synchronic in nature. The sample included 1209 students from standard X from English medium schools situated in Greater Mumbai. The study found that the Mean school organizational health was the highest in private-aided schools followed by private-unaided schools and municipal schools in that order. The Mean academic achievement of students from municipal schools is significantly less than those from private-aided and private-unaided schools. 3.33% of the variance in academic achievement of students is accounted for by school types. However, the Mean academic achievement of students from municipal schools is the highest after adjusting for school organizational health. 0.80% of the variance in academic achievement of students is accounted for by school types after adjusting for school organizational health.*

**Keywords:** School organisational health, School type, Academic achievement.

Organizational health refers to an organization's ability to achieve its goals based on an environment that seeks to improve organizational performance and support student and employee well-being. While these two perspectives are very different, a connection between them means issues in one affect the other. Improving organizational performance involves applying a systems thinking approach at organization, process and role levels, and supporting employee well-being involves addressing both employee satisfaction and employee health (physical, mental and social). It is an organization's ability to function effectively, to cope adequately, to change appropriately, and to grow from within. Within the frame work school, one of the best perspectives for analyzing the nature of the workplace is organizational health. Organizational health (OH) is a concept that has been developed to reflect the effectiveness of an organization in various environments and how the organization reacts to "changes in circumstances (Janice, 2000). The health metaphor was initially used by Miles (1969) to examine the properties of schools. A healthy organization is one that not only survives in its environment, but continues to grow and prosper over the long term. An organization on any given day may be effective or ineffective, but healthy organizations avoid persistent ineffectiveness. Miles, (1969) developed a configuration of healthy organization that consists of ten important properties. The first three aspects reflect the task needs of a social system; the second sets of properties describe its maintenance needs; and the final group of characteristics are growth and development needs all of which forms the dimensions of organizational health. Utilizing Parson (1958), Hoy and Feldman's (1987) concept of organizational health is defined by three levels of control—the technical, managerial, and institutional—which combine to create a healthy school. The technical level addresses issues related to a school's academic emphasis and the affiliation of its teachers, inclusive of job satisfaction and a commitment to colleagues and students. At the managerial level issues of leadership, principal influence and resource support are at work. Lastly, the level of institutional integrity is described as "the degree to which the

<sup>1</sup> Assistant Professor, Department of Education, Shivaji University

<sup>2</sup> Professor & Head, Department of Education, University of Mumbai



school can cope with environment in a way that maintains the educational integrity of its programs” (Hoy & Hannum, 1997, p. 294).

The present study identified three categories of schools based on school types by management. These categories are private-aided schools, private-unaided schools and municipal schools. These three types of schools are then compared on the seven dimensions of Organizational Health Inventory (OHI).

#### REVIEW OF RELATED LITERATURE:

Organizational theorists have long reported that paying attention to culture is the most important action that a leader can perform. Educational theorists have likewise reported that the principals’ impact on learning is mediated through the climate and culture of the school and is not a direct effect (Hallinger and Heck 1998). Watson (2001) opined that if the culture is not hospitable to learning then student achievement can suffer. Fink and Resnick (2001) reminded us that school principals are responsible for establishing a pervasive culture of teaching and learning in each school. A closer look at the relationship of specific aspects of school culture to student learning is needed, however. Hoy and Hannum (1997) posited that healthy schools “successfully adapt to their environments, achieve their goals, and infuse common values and solidarity into the teacher work group” (p. 293). A number of studies by other researchers and reformers have also successfully linked healthy school climates to improved learning environments and increased student achievement (Bossert, 1988; Comer, 1980; Grosin, 1991; Hoy, Hannum & Tschannen-Moran, 1998; McPartland, Balfanze, Jordon & Legters, 1998; Purkey & Smith, 1983; Stedman, 1987). Tsui & Cheng (1999) conducted a contingency study with multi-level analysis of school organizational health and teacher commitment. School organizational health research was founded upon early work in the business-related disciplines and emerged in the literature in the late 1960’s under the semblance of “school climate” (Anderson, 1982). Since that time, a large body of empirical work has been undertaken to understand the school workplace environment and its implications associated with teacher and student outcomes (Hoy, 1990; Hoy, Tarter & Kottkamp, 1991; Hoy & Tarter, 1992; Lemerle, 2005, Lindahl, 2006; Nir, 2002; Tsui & Cheng, 1991). Bevans, Bradshaw, Miech and Leaf (2007) studied staff- and school-level predictors of school organizational health using a multilevel analysis. Pretorius and de Villiers (2009) studied educators’ perceptions of school climate and health in selected primary schools. Omoyemiju & Adediwura (2011) conducted a study of teachers’ perception of schools’ organizational health in Osun State. Ghorbani, Afrassiabi and Rezvani (2012) studied the relationship between organizational health and efficacy. Ranjdoust & Mirzaei (2012) investigated the relationship between organizational health and job satisfaction of school teachers. In a study done by Hoy, Tarter and Bliss (1990:260) the theory-driven Organisational Health Inventory (OHI) was found to be a better predictor of goal achievement, innovativeness, loyalty and cohesiveness — variables directly linked to the functional necessities. Hoy and Forsyth (1986:162) report research findings gained by using the Organisational Health Inventory (OHI): The healthier the organisational dynamics, the greater the degree of faculty trust in the principal, trust in colleagues, and trust in the organisation itself. A strong correlation was found between the openness and health of schools; healthy schools have high trust, high *esprit*, and low disengagement. Open schools are healthy schools, and healthy schools are open. Böhmer and Mentz (1994:101) supported these findings. It was also found that healthy schools have more dedicated and loyal principals and satisfied educators who are confident, secure and highly motivated (Hoy & Forsyth, 1986:163). Hoy *et al.* (1990:265) found that in healthy schools, relationships are more open, educators are more productive, administrators are more reflective, and students achieve at higher levels. It can be concluded that the organisational climate of schools, with particular reference to educator and principal behaviours, has been frequently investigated from a variety of perspectives. Climate and health profiles of schools have proved that good interpersonal relations contribute to the general well-being, quality of life, happiness and satisfaction of educators. Open and/or healthy schools house loyal, trusting, motivated, satisfied, confident and effective educators. Research has also proved a strong positive correlation between the healthiness of schools and their openness and between the unhealthiness of schools and the extent to which they are closed. The growing interest in creating healthy and effective learning environments, not only for learners but also for educators, makes it worthwhile to focus on a school’s climate and/or health, in order to address factors that are conducive to closed and/or unhealthy profiles.

#### NEED FOR THE STUDY:



Ensuring student academic achievement is a constant challenge for public school educators. A review of the relevant literature revealed considerable research pertaining to specific leadership behaviors and leadership styles that impact academic achievement; it clearly demonstrates that principal leadership matters. The literature also suggested that principals' leadership behaviors affect school organizational health and these features influence academic achievement and perhaps more so for at-risk student populations. What appears to be less understood is the nature of academic achievement among students identified as "at-risk." Organizational health provided a conceptual framework within which the relationships among principal and teacher behaviours and at-risk student achievement could be investigated. Therefore, the purpose of this causal-comparative study was to compare identified municipal schools, private-aided schools and private-unaided schools to investigate differences in the organizational health and academic achievement of students.

#### OPERATIONAL DEFINITION OF KEY TERMS:

*School Types:* It refers to the agency that establishes and administers the school. In the present study, it includes private-aided, private-unaided and municipal schools.

*Academic Achievement:* It refers to the total marks obtained by the student in all the subjects in standard X examination conducted by the Maharashtra State Board of Secondary and Higher Secondary Education expressed in terms of percentage is taken as an indicator of the academic achievement of the students.

*Organisational Health:* It refers to the nature and extent of efforts taken by the management/administration to support the school teachers in terms of autonomy and development comprising of institutional integrity, principal influence, consideration, initiating structure, resource support, morale and academic emphasis.

#### METHODOLOGY

The investigation was aimed at comparing academic achievement of existing secondary school students and the school organizational health on the basis of school types. Hence, it has adopted the descriptive method of the causal-comparative type. It may be termed as synchronic in nature as data were collected at one point in time.

##### *Sample and Sampling Techniques:*

In order to select the sample of the study, the researchers adopted a four stage sampling procedure. At the first stage, schools affiliated to the Maharashtra State Board of Secondary and Higher Secondary Education (MSBSHE) and situated in Greater Mumbai were selected using stratified random sampling where the strata included the geographical location of the schools namely, South Mumbai, North Mumbai, and Central Mumbai. At the second stage, schools were selected using stratified sampling where the strata include the type of management of schools namely municipal, private-aided and private-unaided. At the third stage, individual classrooms from the selected schools were selected using simple random sampling (lottery method) technique. At the fourth stage, individual students were selected from the classroom using incidental sampling technique due to reasons beyond the researcher's control.

Initially, the data were collected from 1231 students of standard X<sup>th</sup>. Of these, 22 forms were discarded as they were found to be incomplete. Thus, the final sample size of students was 1209. The wastage rate was 1.78% which is very low. The data were collected from 14 schools with English as the medium of instruction situated in Greater Mumbai and were affiliated to the MSBSHE. The study included 767 boys (63.4%) and 442 girls (36.6%). It consisted of 66 (5.46%), 820 (67.83%) and 323 (26.72%) students from municipal, private-aided and private-unaided schools respectively.

##### *Tools Used:*

*Organisational Health Inventory:* OHI by Hoy, Tarter and Kottkamp (1997) was used. Its internal consistency and test-retest reliabilities in the Indian context are 0.84 and 0.79 respectively. It covers the dimensions of institutional integrity, principal influence, consideration, initiating structure, resource support, morale and academic emphasis.



*Personal Data Sheet for Students:* The tool was developed by the researcher to collect personal information regarding the respondent such as the name, age, gender, the class and division in which he/ she are studying, name and the type of the school.

*Research Questions:*

1. Does the school organizational health differ by school types?
2. Does the academic achievement of students differ by school types?
3. Does the academic achievement of students differ by school types after adjusting for school organizational health?

These research questions were answered by testing null hypothesis using the statistical techniques of ANOVA and ANCOVA.

## ANALYSIS AND INTERPRETATION OF DATA

*Null Hypothesis 1:* There is no significant difference in the school organizational health by school types.

This null hypothesis was tested using the technique of ANOVA. The following table shows the necessary statistics of SOH by school types.

Table 1. Comparison of SOH by School Types

	Private-Aided Schools	Municipal Schools	Private-Unaided Schools	TOTAL
N	820	66	323	1209
MEAN	132.0982	100.8927	128.659	129.4759
SD	2.81	0.24	12.40	9.79

It was found that the F-ratio for SOH by school types is 643.47 which is significant at 0.0001 level. Hence the null hypothesis is rejected. The effect size of school types on SOH computed using  $\omega^2_{est}$  is 0.5152 implying that 51.52% of the variance in school organizational health is accounted for by school types. Further analysis of Mean SOH by school types indicated that the Mean SOH was the highest for private-aided schools followed by private-unaided schools and municipal schools in that order.

*Null Hypothesis 2:* There is no significant difference in the academic achievement of students by school types.

This null hypothesis was tested using the technique of ANOVA. The following table shows the necessary statistics of AAS by school types.

Table 2. Comparison of AAS by School Types

	Private-Aided Schools	Municipal Schools	Private-Unaided Schools	TOTAL
N	820	66	323	1209
MEAN	63.88	55.29	66.24	64.05
SD	11.20	9.47	11.62	11.43

The mean AAS of students were compared on the basis of school type using the technique of one-way ANOVA. The AAS of students from private-aided schools, municipal schools and private-unaided schools were compared and the F-ratio was found to be 21.87 ( $p < 0.0001$ ) and was found to be significant. It may be therefore concluded that there is a significant difference in the academic achievement of students from different school



types. The effect size of school types on AAS computed using  $\omega^2_{\text{est}}$  is 0.0333 implying that 3.33% of the variance in academic achievement of students is accounted for by school types. Further analysis of the data using t-test revealed that (i) the Mean AAS of students from private-aided and private-unaided schools do not differ significantly. (ii) The mean AAS of students from municipal schools is significantly less than those from private-aided and private-unaided schools.

*Null Hypothesis 3:* There is no significant difference in the academic achievement of students by school types after adjusting for school organizational health.

This null hypothesis was tested using the technique of ANCOVA. The following table shows the necessary statistics of AAS by school types after adjusting for SOH.

Table 3. Comparison of AAS by School Types after Adjusting for OH

	Private-Aided Schools	Municipal Schools	Private-Unaided Schools	TOTAL
N	820	66	323	1209
MEAN	64.3256	55.2879	65.1486	64.0521
ADJUSTED MEAN	63.2124	67.4211	65.4954	64.0521

The correlation coefficient between SOH and AAS was found to be 0.26.

It was found that the  $F_{v,x}$ -ratio for AAS by school types is 5.81 which is significant at 0.003 level. Hence the null hypothesis is rejected. The effect size of school types on AAS after adjusting for SOH is 0.0080 implying that 0.80% of the variance in academic achievement of students is accounted for by school types after adjusting for school organizational health. Further analysis of Mean AAS by school types indicated that the Mean AAS (after adjusting for school organizational health) was the lowest for private-aided schools and differed significantly from private-unaided and municipal schools. On the other hand, no significant difference was found in the Mean AAS between private-unaided schools and municipal schools. It is pertinent to note here that after adjusting for school organizational health, the academic achievement of students was found to be the highest in case of municipal schools.

## CONCLUSIONS

The organizational health of schools measured in terms of the nature and extent of efforts taken by the management/administration to support the teachers in terms of autonomy and development comprising of institutional integrity, principal influence, consideration, initiating structure, resource support, morale and academic emphasis differs on the basis of the type of management of schools with the private-aided schools being more healthy followed by private-unaided schools and municipal schools in that order. Similar is the case of academic achievement of students from these school types. However, finding of hypothesis implies that the differences in academic achievement of students by school types arise on account of the organizational health of the schools. In fact, it is a suppressor variable in case of students from municipal schools as is seen from the adjusted Mean AAS in table 3 which indicate that the Mean Adjusted AAS is the highest in case of students from municipal schools. This implies that the lower academic achievement of students cannot be attributed to their lower socio-economic status but to the poor organizational health in such schools. In other words, this implies that municipal schools lack the ability to function effectively, to cope adequately, to change appropriately and to grow from within.

Teachers from municipal schools need to be protected from unreasonable community and parental demands. The school is vulnerable to outside pressure, their principal need to influence the actions of his/her superiors in the education department of the local government, persuade them get additional consideration, be more friendly, supportive, open and collegial, show a genuine concern for the welfare of the teachers, need to be both task –and achievement oriented, need to articulate clearly the work expectations, standards of performance and procedures, ensure adequate classroom supplies and instructional materials as well as provide extra material





immediately if requested, create a collective sense of friendliness, openness, enthusiasm, and trust among teachers where teachers like each other, like their jobs, and help each other; and are proud of their school and feel a sense of accomplishment in their jobs, ensure that the school is driven by a quest for academic excellence, set out high but achievable academic goals for students, create a learning environment is orderly and serious where teachers believe in their students' ability to achieve; and students work hard and respect those who do well academically. This requires a special effort by the local government in terms of in-service training programme for the principals and teachers of municipal schools so as to make the schools more healthy for ensuring better performance of their students.

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